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H3

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O'Keefe, Denise S.

<120> DNA Encoding the Prostate-Specific Membrane Antigen-Like Gene and Uses Thereof

<130> D6230

<140> USSN 09/973,382
<141> 2001-10-09

<150> PCT/US00/09417
<151> 2000-04-09

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<212> DNA
<213> *Homo sapiens*

<220>
<223> cDNA sequence of PSMA-like gene

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35 40 45
Arg Ile Tyr Asn Val Ile Gly Thr Leu Arg Gly Ala Val Glu Pro
50 55 60
Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe
65 70 75
Gly Gly Ile Asp Pro Gln Ser Gly Ala Ala Val Val His Glu Thr
80 85 90
Val Arg Ser Phe Gly Thr Leu Lys Glu Gly Trp Arg Pro Arg
95 100 105
Arg Thr Ile Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu
110 115 120
Leu Gly Ser Thr Glu Trp Ala Glu Asp Asn Ser Arg Leu Leu Gln
125 130 135

Glu Arg Gly Val Ala Tyr Ile Asn Ala Asp Ser Ser Ile Glu Gly
140 145 150
Asn Tyr Thr Leu Arg Val Asp Cys Thr Pro Leu Met Tyr Ser Leu
155 160 165
Val Tyr Asn Leu Thr Lys Glu Leu Lys Ser Pro Asp Glu Gly Phe
170 175 180
Glu Gly Lys Ser Leu Tyr Glu Ser Trp Thr Lys Lys Ser Pro Ser
185 190 195
Pro Glu Phe Ser Gly Met Pro Arg Ile Ser Lys Leu Gly Ser Gly
200 205 210
Asn Asp Phe Glu Val Phe Phe Gln Arg Leu Gly Ile Ala Ser Gly
215 220 225
Arg Ala Arg Tyr Thr Lys Asn Trp Glu Thr Asn Lys Phe Ser Gly
230 235 240
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245 250 255
Lys Phe Tyr Asp Pro Met Phe Lys Tyr His Leu Thr Val Ala Gln
260 265 270
Val Arg Gly Gly Met Val Phe Glu Leu Ala Asn Ser Ile Val Leu
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Asp Lys Ile Tyr Asn Ile Ser Met Lys His Pro Gln Glu Met Lys
305 310 315
Thr Tyr Ser Leu Ser Phe Asp Ser Leu Phe Ser Ala Val Lys Asn
320 325 330
Phe Thr Glu Ile Ala Ser Lys Phe Ser Glu Arg Leu Gln Asp Phe
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Asp Lys Ser Asn Pro Ile Leu Leu Arg Met Met Asn Asp Gln Leu
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Arg Pro Phe Tyr Arg His Val Ile Tyr Ala Pro Ser Ser His Asn
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Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Leu Phe
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35	40	45
Ser Asn Glu Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala		
50	55	60

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Asp	Ser	Val	Glu	Leu	Ala	His	Tyr	Asp	Val	Leu	Leu	Ser	Tyr	Pro
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Asn	Lys	Thr	His	Pro	Asn	Tyr	Ile	Ser	Ile	Ile	Asn	Glu	Asp	Gly
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Asn	Glu	Ile	Phe	Asn	Thr	Ser	Leu	Phe	Glu	Pro	Pro	Pro	Pro	Gly
140									145					150
Tyr	Glu	Asn	Val	Ser	Asp	Ile	Val	Pro	Pro	Phe	Ser	Ala	Phe	Ser
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Pro	Gln	Gly	Met	Pro	Glu	Gly	Asp	Leu	Val	Tyr	Val	Asn	Tyr	Ala
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Cys	Ser	Gly	Lys	Ile	Val	Ile	Ala	Arg	Tyr	Gly	Lys	Val	Phe	Arg
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Ser	Tyr	Pro	Asp	Gly	Trp	Asn	Leu	Pro	Gly	Gly	Gly	Val	Gln	Arg
245									250					255
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Gly	Tyr	Pro	Ala	Asn	Glu	Tyr	Ala	Tyr	Arg	Arg	Gly	Ile	Ala	Glu
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Thr Leu Arg Gly Ala Val Glu Pro Asp Arg Tyr Val Ile Leu Gly		
365	370	375
Gly His Arg Asp Ser Trp Val Phe Gly Gly Ile Asp Pro Gln Ser		
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Gly Ala Ala Val Val His Glu Ile Val Arg Ser Phe Gly Thr Leu		
395	400	405
Lys Lys Glu Gly Trp Arg Pro Arg Arg Thr Ile Leu Phe Ala Ser		
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Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr Glu Trp Ala		
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Glu Glu Asn Ser Arg Leu Leu Gln Glu Arg Gly Val Ala Tyr Ile		
440	445	450
Asn Ala Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val Asp		
455	460	465
Cys Thr Pro Leu Met Tyr Ser Leu Val His Asn Leu Thr Lys Glu		
470	475	480
Leu Lys Ser Pro Asp Glu Gly Phe Glu Gly Lys Ser Leu Tyr Glu		
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Ser Trp Thr Lys Lys Ser Pro Ser Pro Glu Phe Ser Gly Met Pro		
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Arg Ile Ser Lys Leu Gly Ser Gly Asn Asp Phe Glu Val Phe Phe		
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Gln Arg Leu Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr Lys Asn		
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Trp Glu Thr Asn Lys Phe Ser Gly Tyr Pro Leu Tyr His Ser Val		
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 chromosome 11q

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<210> 10

<211> 22

<212> DNA

<213> Artificial sequence

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<223> antisense oligonucleotide primer based upon
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regions of the PSMA-like gene (exon 3)

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clone used to amplify the corresponding
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<210> 12

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clone used to amplify the corresponding
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clone used to amplify the corresponding
regions of the PSMA-like gene (exons 5-6)

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<210> 14
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intronic sequences of the PSMA genomic
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clone used to amplify the corresponding
regions of the PSMA-like gene (exons 8-9)

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clone used to amplify the corresponding
regions of the PSMA-like gene (exon 11)

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clone used to amplify the corresponding
regions of the PSMA-like gene (exon 12)

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intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 12)

<400> 24
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<210> 25
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<220>
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intrinsic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 13)

<400> 25
tggtaggaat ttagcagtgg tc 22

<210> 26
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<212> DNA
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<223> antisense oligonucleotide primer based upon
intrinsic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 13)

<400> 26
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<210> 27
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<220>
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intrinsic sequences of the PSMA genomic
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regions of the PSMA-like gene (exon 14)

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<210> 28
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intrinsic sequences of the PSMA genomic
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regions of the PSMA-like gene (exon 14)

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<210> 29
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<220>
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regions of the PSMA-like gene (exon 15)

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<210> 30
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intronic sequences of the PSMA genomic
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regions of the PSMA-like gene (exon 15)

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<210> 31
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<220>
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intronic sequences of the PSMA genomic
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regions of the PSMA-like gene (exons 16-17)

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<210> 32
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<212> DNA
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<210> 33
<211> 22
<212> DNA
<213> Artificial sequence

<220>
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<223> sense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 18)

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<210> 34
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<212> DNA
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<400> 34
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<210> 35
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<400> 38
actgtgatac agtggatagc cgct

24

SEQ 19